List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 7 (Cancelled)

Claim 8 (Currently Amended) An apparatus for monitoring a measurement transmitter of a field device determining and/or monitoring a physical and/or chemical process parameter, the field device including a sensor and a transmitter, the apparatus, comprising:

a housing;

at least one sensor provided in said housing for determining the temperature and relative humidity in said housing over a period of time in predetermined intervals; and

a control-/evaluation-unit, which, on the basis of the measured temperature and relative humidity, determines the absolute humidity and/or dewpoint in said housing, and issues an alarm when the absolute humidity and/or dewpoint in said housing reaches a critical value, wherein:

the sensor of the field device is connected in close proximity to said housing[[.]] ; and

the transmitter of the field device is mounted on the sensor.

Claim 9 (Previously presented) The apparatus as claimed in Claim 8, wherein:

said at least one sensor for measuring temperature and relative humidity is an SMD-semiconductor-sensor.

Claim 10 (Previously presented) The apparatus as claimed in Claim 8, further comprising:

a memory unit in which a point, or range, of operation for the temperature is predetermined.

Claim 11 (Previously presented) The apparatus as claimed in Claim 8, further comprising:

an input unit, by means of which the point, or range, of operation for the temperature can be entered.

Claim 12 (Previously presented) The apparatus as claimed in Claim 8, wherein:

said control-/evaluation-unit sets the critical value, such that, in the case of the lowest possible operating temperature, no condensate forms in said housing.

Claim 13 (Previously presented) The apparatus as claimed in Claim 8, wherein:

said control-/evaluation-unit sets an alarm when a predetermined tolerance-value near the critical value is reached or subceeded.

Claim 14 (Previously presented) The apparatus as claimed in Claim 13, wherein:

said control-/evaluation-unit, on the basis of historical information, issues information on when the critical value is predicted to be reached.

Claim 15 (Previously presented) The apparatus as claimed in claim 8, wherein:

said housing is mounted on the sensor of the field device.